IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A method for determining a substrate type comprising:

disposing said substrate in a plasma processing system;

exposing said substrate to a process in said plasma processing system;

detecting an optical signal from said process; and

determining said substrate type by comparing said optical signal with a threshold value,

said threshold value comprises setting said threshold value to an average of an intensity ratio corresponding to an incorrect substrate type and an intensity ratio corresponding to a correct substrate type.

Claim 2 (Original): The method of claim 1, wherein said exposing said substrate to said process comprises exposing said substrate to a seasoning process.

Claim 3 (Original): The method of claim 1, wherein said detecting said optical signal comprises using optical emission spectroscopy (OES).

Claim 4 (Original): The method of claim 3, wherein said using optical emission spectroscopy comprises acquiring an optical emission spectrum.

Claim 5 (Original): The method of claim 4, wherein said detecting said optical signal comprises determining an intensity ratio from said optical emission spectrum.

Claim 6 (Original): The method of claim 5, wherein said comparing said optical signal with said threshold value comprises comparing said intensity ratio with said threshold value.

Claim 7 (Original): The method of claim 6, wherein said determining said substrate type comprises determining a correct substrate type when said intensity ratio has a value less than said threshold value, and determining an incorrect substrate type when said intensity ratio has a value greater than said threshold value.

Claim 8 (Original): The method of claim 6, wherein said determining said substrate type comprises identifying a seasoning substrate when said intensity ratio has a value less than said threshold value, and identifying a bare silicon substrate when said intensity ratio has a value greater than said threshold value.

Claim 9 (Canceled).

Claim 10 (Currently Amended): The method of claim 1, wherein said comparing said optical signal with said threshold value comprises comparing said optical signal with at least one of a static threshold value, [[and]] or a dynamic threshold value.

Claim 11 (Original): A system for determining a substrate type comprising:

a diagnostic system configured to be coupled with a plasma processing system, and configured to provide an optical signal from a process performed on a substrate in said plasma processing system; and

a controller coupled to said diagnostic system and configured to determine a type of said substrate by comparing said optical signal to a threshold value.

Claim 12 (Original): The system of claim 11, wherein said diagnostic system is configured to provide an optical signal from a seasoning process.

Claim 13 (Original): The system of claim 11, wherein said diagnostic system comprises an optical emission spectroscopy (OES) system.

Claim 14 (Original): The system of claim 13, wherein said optical emission spectroscopy system is configured to provide an optical emission spectrum from said process.

Claim 15 (Original): The system of claim 14, wherein said controller is configured to determine an intensity ratio from said optical emission spectrum.

Claim 16 (Original): The system of claim 15, wherein said controller compares said optical signal with said threshold value by comparing said intensity ratio with said threshold value.

Claim 17 (Original): The system of claim 16, wherein said controller determines said substrate type by determining a correct substrate type when said intensity ratio has a value less than said threshold value, and determining an incorrect substrate type when said intensity ratio has a value greater than said threshold value.

Claim 18 (Original): The system of claim 16, wherein said controller determines said substrate type by determining a seasoning substrate when said intensity ratio has a value less than said threshold value, and determining a bare silicon substrate when said intensity ratio has a value greater than said threshold value.

Claim 19 (Original): The system of claim 17, wherein said controller determines said substrate type by comparing to a threshold value comprising a value equal to an average of an intensity ratio corresponding to said incorrect substrate type and an intensity ratio corresponding to said correct substrate type.

Claim 20 (Original): The system of claim 11, wherein said controller determines said substrate type by comparing to a threshold value comprising at least one of a static threshold value, and a dynamic threshold value.

Claim 21 (Currently Amended): A method for determining a substrate type comprising:

disposing said substrate in a plasma processing system;

exposing said substrate to a seasoning process in said plasma processing system;

detecting an optical signal from said process using optical emission spectroscopy, wherein said optical signal comprises an intensity ratio of a first intensity corresponding to a first wavelength band and to a second intensity corresponding to a second wavelength band; and

determining said substrate type by comparing said optical signal with a threshold value, wherein said threshold value is set to an average value between an intensity ratio for a correct substrate type and an intensity ratio for an incorrect substrate type.

Claim 22 (Original): The method of claim 1, wherein said exposing said substrate to said process comprises exposing said substrate to a production process.